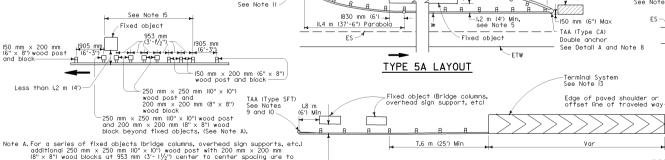
<u>NOTES</u>

- I. Post, blocks and hardware to be used are shown on Standard Plans A77B, A77C and A77CA.
- 2. Guard rail post spacing to be 1905 mm (6'-3") center to center, except as otherwise noted.
- 3. Except as noted, posts and blocks shown are 150 mm \times 200 mm (6" \times 8") wood. MW 150 mm \times 14 mm (W6 \times 8.5 or W6 \times 9) steel post with 200 mm \times 200 mm (8" \times 8") notched wood blocks may be used for 150 mm \times 200 mm (6" \times 8") wood posts and blocks where applicable and when specified.
- 4. Rail elements to be installed as shown on Standard Plan A77AA for wood post and wood blocks installations and as shown on Standard Plan A77AA for steel post and wood block installations.
- 5. A L2 m (4) minimum clearence is required between the face of the railing and the face of a fixed object located directly behind a guard railing post, Mhere a fixed object is behind the railing, but not directly behind a guard railing post, a 910 mm (3') minimum clearence, is required between the face of the railing and the face of the fixed object. Where minumum clearences cannot be obtained, construct guard railing as shown in "Approach Railing Transition Details for Fixed Objects" on this plan.
- 6. Direction of traffic indicated by ---- .
- 7. For connection details, see Standard Plans A77J or A77K.
- 8. For terminal anchor assembly (Type CA) details, see Standard Plan A771. Where a crash cushion is required as specified in Note II and the crash cushion attaches to the ends of the guard railing, the terminal anchor assembly (Type CA) and return section may not be required (see Prolect Plans).
- 9. For terminal anchor assembly (Type SFT) details, see Standard Plan A77G.
- 10. Terminal sections not to be installed on trailing end of guard railing constructed agjacent to one-way roadways.
- II. A crash cushion is required for Type 4A, 5A and 6A layouts, when the end of the guard railing is within 9.0 m (30) of the edge of traveled way (ETW) of approaching traffic. For the type of crash cushion to be used, see Project Plans and the Special Provisions.
- 12. When width "W" exceeds 3.8 m (12'-6"); to calculate the length of parabolic flare, use "L=3W" and round to nearest 3.8 m (12'-6").
- 13. For the type of terminal system to be used, see Project Plans and the Special Provisions.
- 14. For details of a terminal system typically used as a flared end treatment on Type 8A Layouts, see Standard Plans A7IL. For details of a terminal system typically used on a Type 8A Layouts where site conditions will not accompadate a flared end, see Standard Plans A77M and A7TN.
- I5. Use a flat plate washer on the rail face when attaching rail element to these posts.
- 16. Wood post with wood block are only to be used for these posts and blocks.

be used between fixed objects.



TAA (Type CA)

Double anchor

150 mm

(6") Max

See Detail A and Note 8

-1.2 m (4') Min

See Note 5

APPROACH RAILING TRANSITION DETAIL
FOR FIXED OBJECT

Use with Type 5A, 6A and 8A layouts where minimum clearence specified in Note 5 cannot be obtained between the face of the guard railing and the fixed object(s).

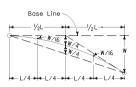
Begin flare

Base Line (Edge of paved shoulder or offset line of edge of traveled way):

Y = 0 ffset from base line $Y = \frac{WX^2}{2}$ $Y = \frac{WX^2}{2}$ X = 0 fistance, dong base line X = 0 fistance, dong base line

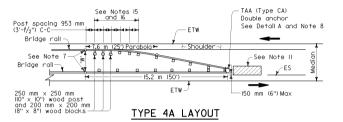
L = Length of flare

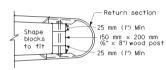
PARABOLIC FLARE OFFSETS



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TYPICAL PARABOLIC LAYOUT





TAA (Type CA)

DETAIL A

Double anchor See Detail A and Note 8 ETW II.4 m (37'-6") Parabola -FS 1.2 m (4') Min, see Note 5 I= 1830 mm (6′) 1830 mm (6') --Fixed object Single anchor -See Note II See Note 8 See Note II _2`W′ - 1.2 m (4') Min. see Note 5 15.2 m (50') FTW -

TYPE 6A LAYOUT

STATE OF CALFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING

TYPICAL LAYOUTS

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses (). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

TAA = Terminal Anchor Assembly

TYPE 8A LAYOUT

- ETW

II.4 m (37'-6") Parabola

-1.2 m (4') Min. see Note 5

NO SCALE

A77E